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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,922	03/23/2004	David Paul Boden	5432/55399	3876

7590 04/25/2006

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EXAMINER

CREPEAU, JONATHAN

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,922

Applicant(s)

BODEN ET AL.

Examiner

Jonathan S. Crepeau

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-22, 27-33 and 37-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-22, 27, 30-32, 42-45, 47, 49 and 51 is/are allowed.
- 6) ☒ Claim(s) 28, 33, 37-41, 46, 48, 50 and 52 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/28/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office action addresses claims 10-22, 27-33 and newly added claims 37-52. Claims 37-41 are newly rejected under 35 USC 112 second paragraph. Claims 10-22, 27, 30-32, 42-45, 47, 49, and 51 are allowed and claims 29 and 37-41 contain allowable subject matter. Claims 28 and 46 remain rejected under 35 USC 102 over Chen. Claims 28, 33, 46, 48, 50, and 52 are newly rejected under 35 USC 102 and 103, however these rejections were not necessitated by amendment. This action is non-final.

Claim Rejections - 35 USC § 112

2. Claims 37-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 37-41 contains the trademark/trade name HT-100. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the

trademark or trade name. In the present case, the trademark/trade name is used to identify/describe lead monoxide and, accordingly, the identification/description is indefinite.

It is noted that this ground of rejection is based on the information contained on page 1 of the following document: hammondlead.com/lithargemsds.pdf.

Applicant is further advised that should claim 38 be amended to delete "HT-100", the claim would then be a substantial duplicate of claim 19.

Claim Rejections - 35 USC § 102

3. Claims 28 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (U.S. Pre-Grant Publication No. 2002/0124388). Chen is directed to lead-acid batteries. Initially, a composition comprising lead oxide, water, and sulfuric acid is reacted (see paragraphs 10 and 22). As the materials react, tetrabasic lead sulfate (TTBLS) is formed. The lead oxide may comprise orthorhombic lead oxide. The TTBLS is considered to be "micronized" since its crystal size is about 2-4 microns (see paragraph 28). Regarding claim 28, the composition is added into a polymer (i.e., battery paste mix) to form a battery paste (see paragraph 23).

Thus, the instant claims are anticipated.

4. Claims 28, 33, 46, and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Klein et al (U.S. Pre-Grant Publication No. 2004/0121233). The reference is directed to an

additive for lead-acid battery pastes. As disclosed in the abstract, the additive comprises tetra basic lead sulfate having an average particle size less than about 3 microns. Such additive is mixed with a battery paste comprising lead oxide, and subjected to a curing process to form a battery plate (see [0022]).

Thus, the instant claims are anticipated.

Claim Rejections - 35 USC § 103

5. Claims 50 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al.

The reference is applied to claims 28, 33, 46, and 48 for the reasons stated above. However, the reference does not expressly teach that the weight percentage of the additive added to the battery paste mix is within the claimed range.

However, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would have been motivated to use the smallest amount of additive possible while still obtaining a good result. It has been held that the discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980). As such, the claimed range of additive content is not considered to distinguish over the reference.

Response to Arguments

6. Applicant's arguments filed March 28, 2006 have been fully considered but they are not persuasive. Applicants state that "Chen's TTBLS crystals are not micronized." However, as set forth in the above rejection, it is believed that Chen anticipates this limitation. The exact language of claim 28 is "creating a micronized tetra basic lead sulfate." Chen's disclosure of TTBLS having a crystal size of about 2-4 microns is considered to be anticipatory of this language.

It is further stated that "Chen does not make, use or put an additive in a paste to make a paste product." However, in Chen, it is believed that the disclosure of mixing a polymer (corresponding to the claimed "battery paste mix") and the TTBLS anticipates the claimed step of "incorporating the micronized tetra basic lead sulfate into a battery paste mix." It is submitted that the composition of the battery paste mix should be specified in the claim to distinguish over Chen.

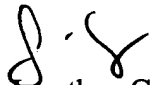
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jonathan Crepeau
Primary Examiner
Art Unit 1746
April 21, 2006